

***IN THE UNITED STATES PATENT AND TRADEMARK OFFICE***

Applicant: Grant THOMSON et al  
Title: SPECTROMETER APPARATUS  
Appl. No.: Unassigned  
Filing Date: Herewith  
Examiner: Unassigned  
Art Unit: Unassigned

**PRELIMINARY AMENDMENT UNDER 37 CFR 1.115**

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Prior to examination of the present National Stage Application, Applicant respectfully requests that the application be amended as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this document.

**Remarks/Arguments** begin on page 4 of this document.

Please amend the application as follows:

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**CLAIMS**

1. (Currently Amended) Spectrometer apparatus including a radiation transparent window (12) for supporting a sample on a surface (12H), an optical system (19) for directing radiation onto the sample through the window (12) at an angle to the normal to the window surface and for receiving radiation reflected from the sample through the window, ~~characterised in that~~ wherein the apparatus includes a corrective optics device (40) arranged to increase the accuracy of imaging of the surface of the sample.
2. (Currently Amended) Spectrometer apparatus according to Claim 1, ~~characterised in that~~ wherein the corrective optics device includes a wedge-shape prism (40).
3. (Currently Amended) Spectrometer apparatus according to ~~any one of the preceding claims, characterised in that~~ Claim 1, wherein the corrective optics device (40) is located adjacent a focus of the optical system (19).
4. (Currently Amended) Spectrometer apparatus according to ~~any one of the preceding claims, characterised in that~~ Claim 1, wherein the corrective optics device (40) is located to receive radiation from the sample.
5. (Currently Amended) Spectrometer apparatus according to ~~any one of the preceding claims, characterised in that~~ Claim 1, wherein the corrective optics device (40) is located adjacent a reflector (28).
6. (Currently Amended) Spectrometer apparatus according to Claim 5, ~~characterised in that~~ wherein the corrective optics device (40) has a reflecting surface (28) formed on a face (41) of the device.
7. (Currently Amended) Spectrometer apparatus according to ~~any one of the preceding claims, characterised in that~~ Claim 1, wherein the apparatus includes an imaging detector (4) arranged to receive radiation from the optical system (19).

8. (Currently Amended) Spectrometer apparatus according to ~~any one of the preceding claims, characterised in that~~ Claim 1, wherein the apparatus includes an arm (13) for applying pressure to urge the sample into close contact with the window surface (12H).

9. (Currently Amended) An spectrometer system including a source (2) of infrared radiation, an analyser (3), an imaging detector (4) and an ATR unit (1) including a radiation transparent window (12) for supporting a sample on a surface (12H), an optical system (19) for directing radiation onto the sample through the window (12) at an angle to the normal to the window surface (12H) and for receiving radiation reflected from the sample through the window, ~~characterised in that~~ wherein the apparatus includes a corrective wedge-shape prism (40) located in the path of radiation to correct focal plane orientation such that it lies closer to the surface (12H) of the window (12).

10. (Currently Amended) An spectrometer system including a source (2) of infrared radiation, an analyser (3), an imaging detector (4) and an ATR unit (1) including a radiation transparent window (12) for supporting a sample on a surface (12H), an optical system (19) for directing radiation onto the sample through the window (12) at an angle to the normal to the window surface (12H) and for receiving radiation reflected from the sample through the window, ~~characterised in that~~ wherein the apparatus includes a corrective wedge-shape prism (40) located in the path of radiation to correct anamorphic magnification at the surface (12H) of the window (12).

REMARKS

Applicant respectfully requests that the foregoing amendments be made prior to examination of the present application.

The claims have been amended to delete the presence of multiple dependencies. Claims 1-10 remain pending in this application.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date March 3, 2006

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